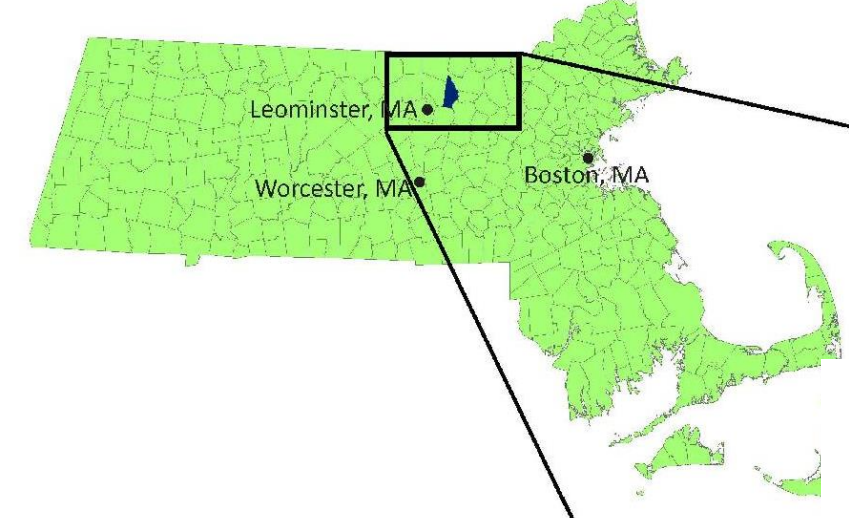


- Map 1. Shirley's Regional Context
- Map 2. Current Land Cover and Use
- Map 3. Historic Structures and Districts
- Map 4. Environmental Justice Community and Open Space Lands
- Map 5. Major Land-use Changes in Shirley, 1995 to 2017
- Map 6. Existing Surface Infrastructure and Open Space
- Map 7. Groundwater Resources: Public Water Supply Wells, Aquifers, and Recharge Areas
- Map 8. Areas in Shirley Served by a Public Water Supply
- Map 9. Zoning
- Map 10. Topography
- Map 11. Surficial Geology and Farmland Soils
- Map 12. Water Resources and Major Drainage Basins
- Map 13. Forestland Soils
- Map 14. Unique and Special Areas
- Map 15. Important Plant and Wildlife Habitat
- Map 16. FEMA Flood Zones and Impervious Surfaces
- Map 17. Environmental Challenges
- Map 18. Parks, Playing Fields, and Open Space
- Map 19. Open Space Types and Ownership
- Map 20. Development Limitations and Zoning
- Map 21. Conceptual Action Plan



# Map 1. Shirley's Regional Context

## Commonwealth of Massachusetts



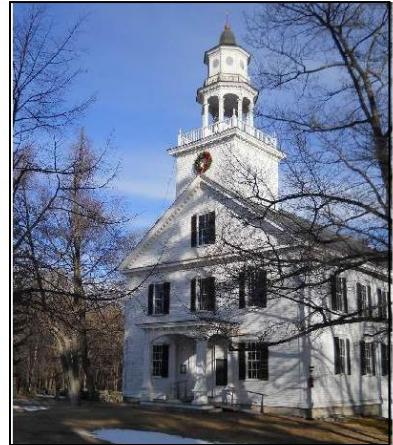
Monarch Butterfly on New England Aster



Barn on Shaker Road

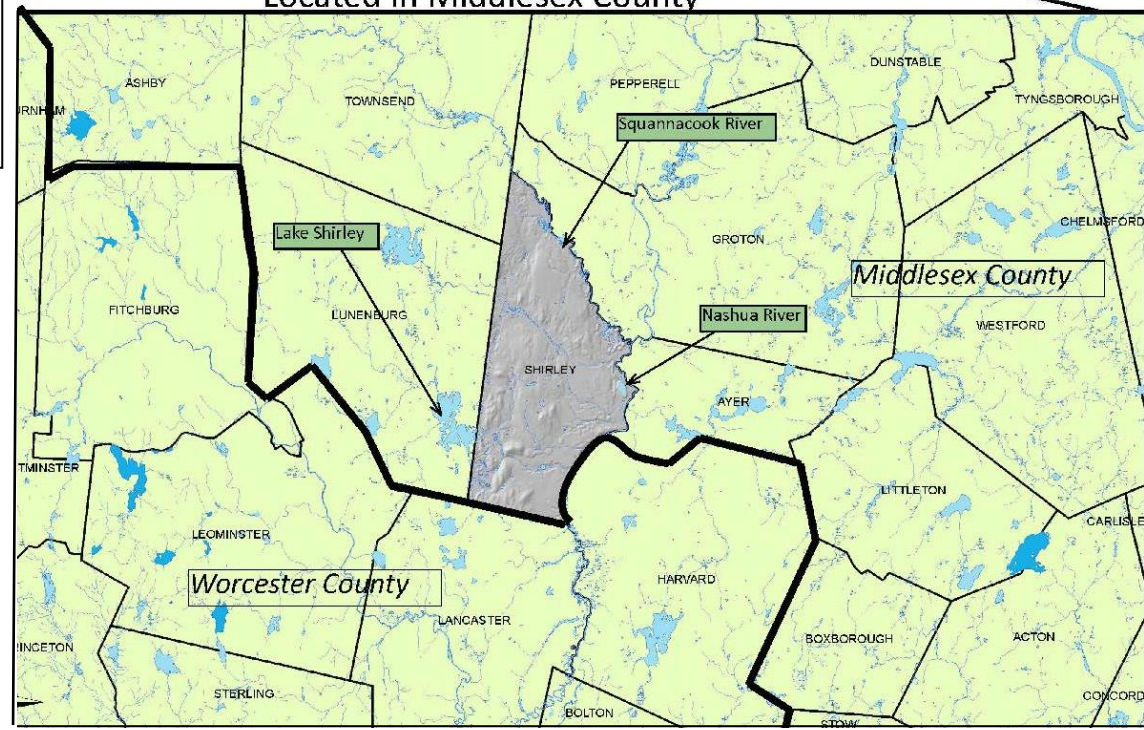


Fredonian Park and Nature Center

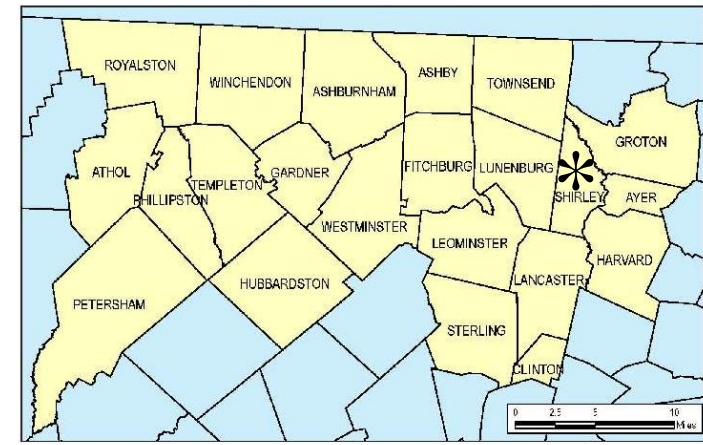


Shirley's Historic Meeting House

## Shirley, MA Located in Middlesex County



Beaver Dam at Valley Farm



Montachusett Regional Planning Commission Service Area

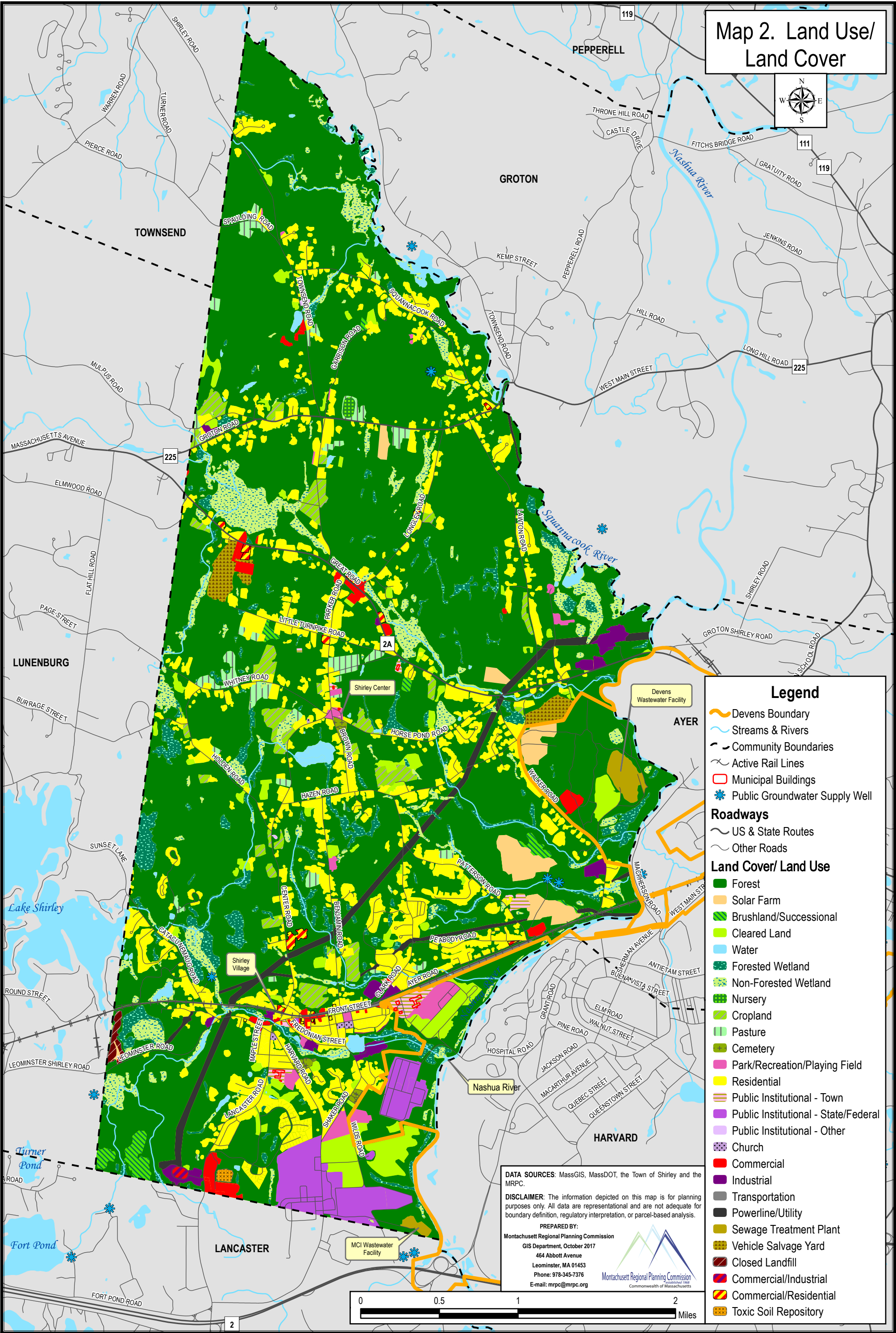


Community Gardens, Longley Acres



Mystical Maze Playground, Benjamin Hill Park and Recreation Area





Map 2. Land Use/  
Land Cover



**Legend**

- Devens Boundary
  - Streams & Rivers
  - Community Boundaries
  - Active Rail Lines
  - Municipal Buildings
  - Public Groundwater Supply Well
- Roadways**
- US & State Routes
  - Other Roads
- Land Cover/ Land Use**
- Forest
  - Solar Farm
  - Brushland/Successional
  - Cleared Land
  - Water
  - Forested Wetland
  - Non-Forested Wetland
  - Nursery
  - Cropland
  - Pasture
  - Cemetery
  - Park/Recreation/Playing Field
  - Residential
  - Public Institutional - Town
  - Public Institutional - State/Federal
  - Public Institutional - Other
  - Church
  - Commercial
  - Industrial
  - Transportation
  - Powerline/Utility
  - Sewage Treatment Plant
  - Vehicle Salvage Yard
  - Closed Landfill
  - Commercial/Industrial
  - Commercial/Residential
  - Toxic Soil Repository

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

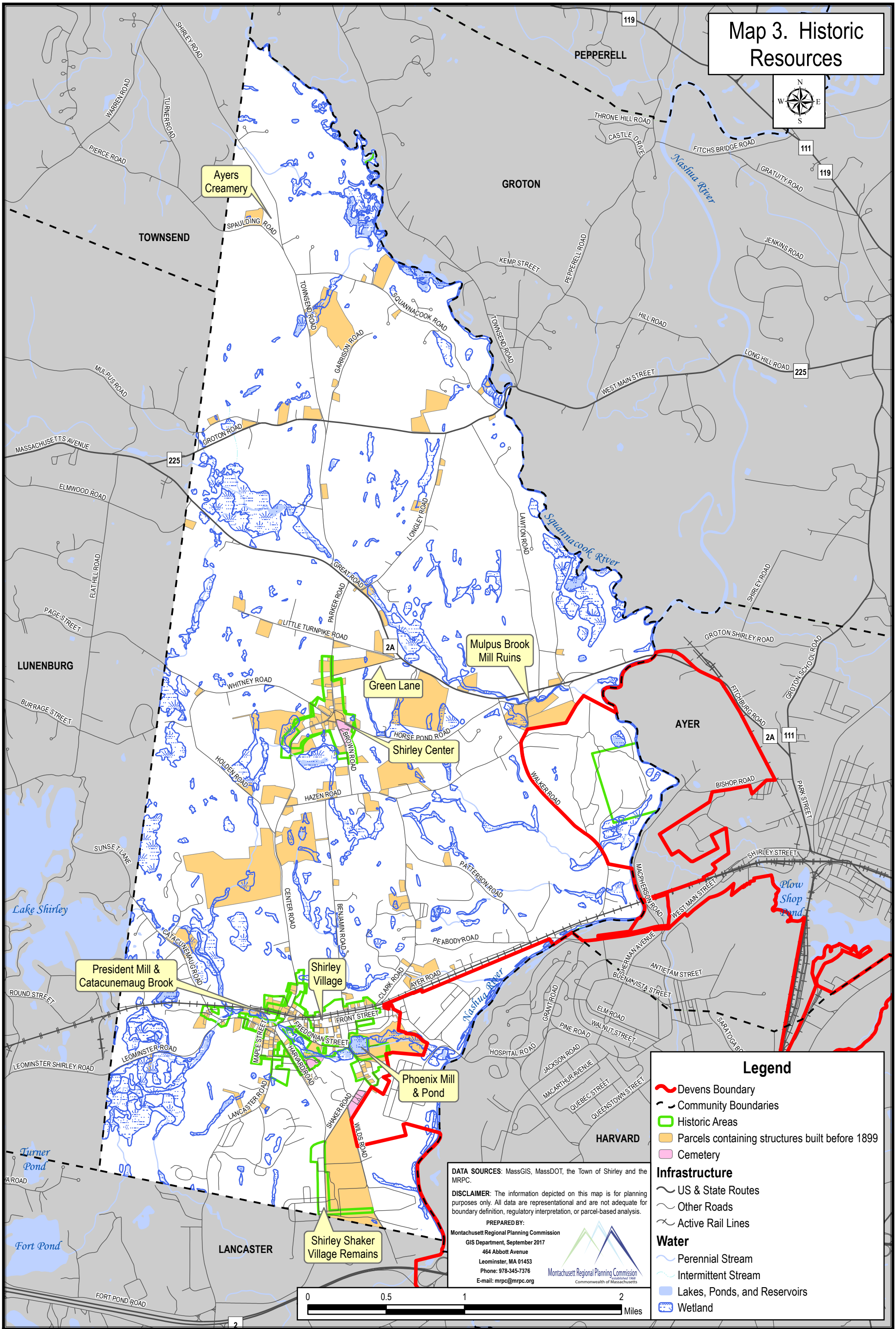
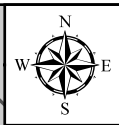
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Montachusett Regional Planning Commission  
GIS Department, October 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)

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# Map 3. Historic Resources



## Legend

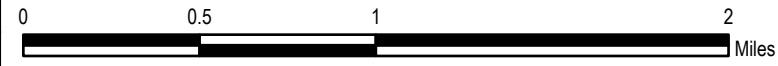
- Devens Boundary
- Community Boundaries
- Historic Areas
- Parcels containing structures built before 1899
- Cemetery
- Infrastructure**
  - US & State Routes
  - Other Roads
  - Active Rail Lines
- Water**
  - Perennial Stream
  - Intermittent Stream
  - Lakes, Ponds, and Reservoirs
  - Wetland

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

**DISCLAIMER:** The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

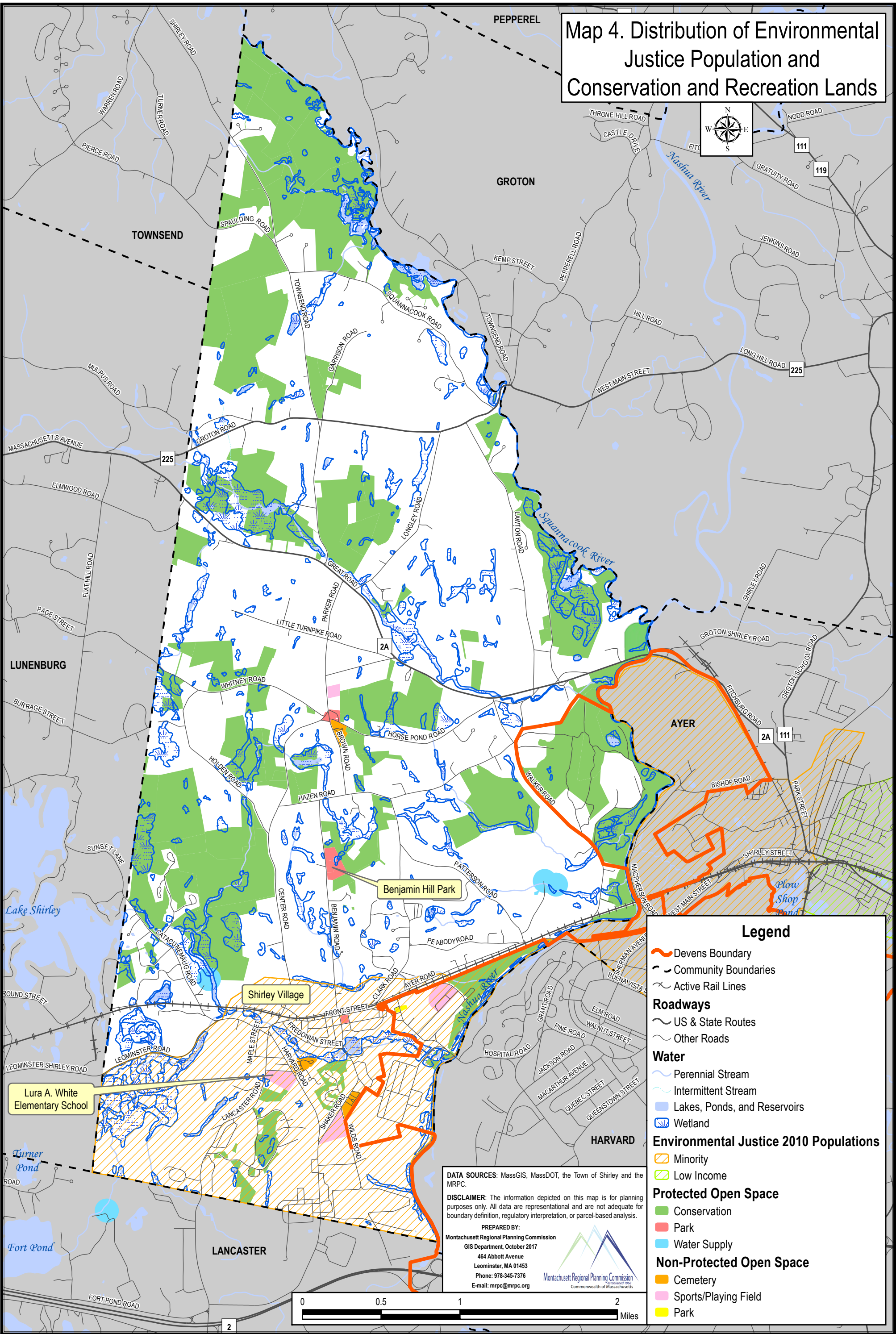
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Montachusett Regional Planning Commission  
GIS Department, September 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)

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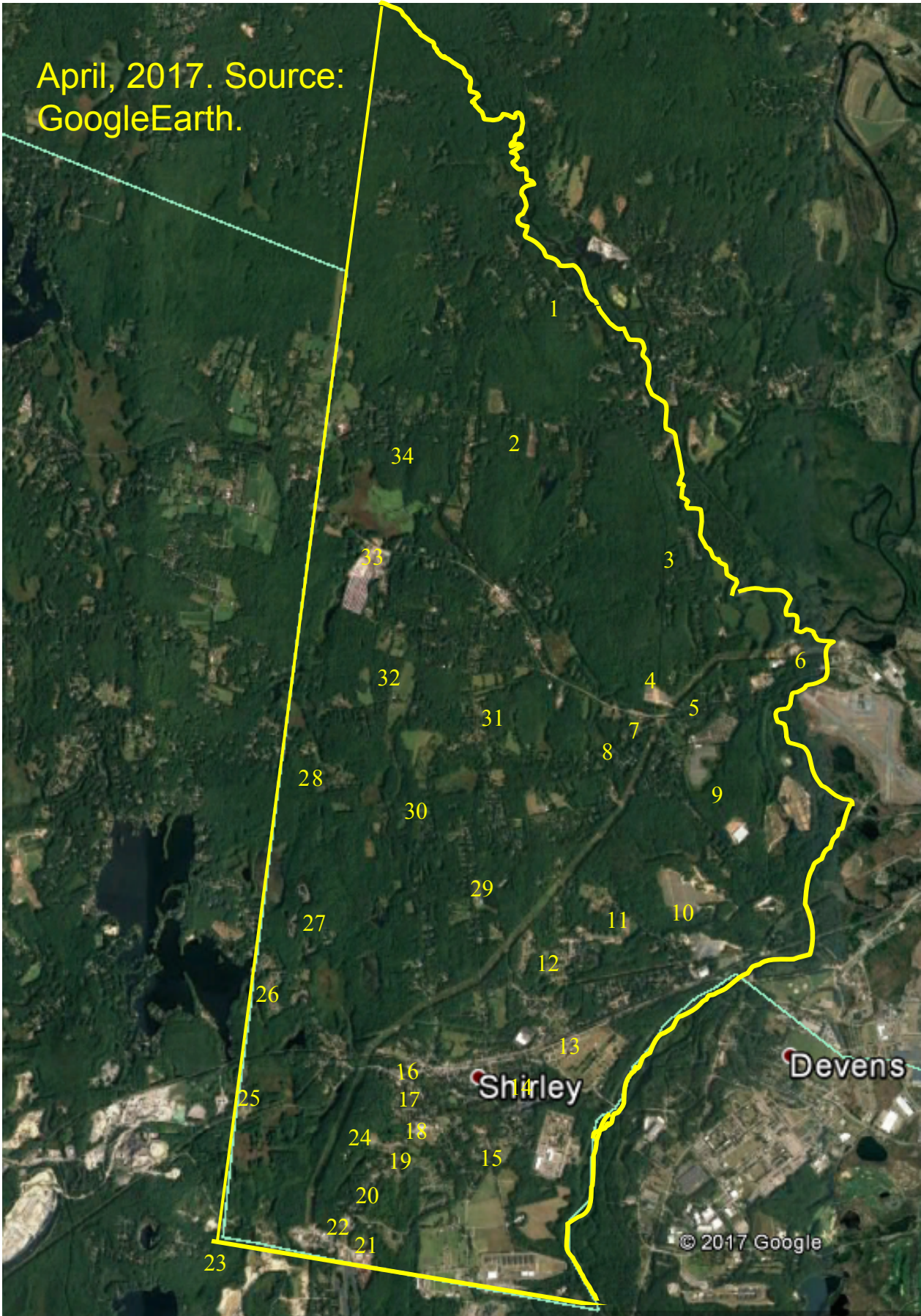
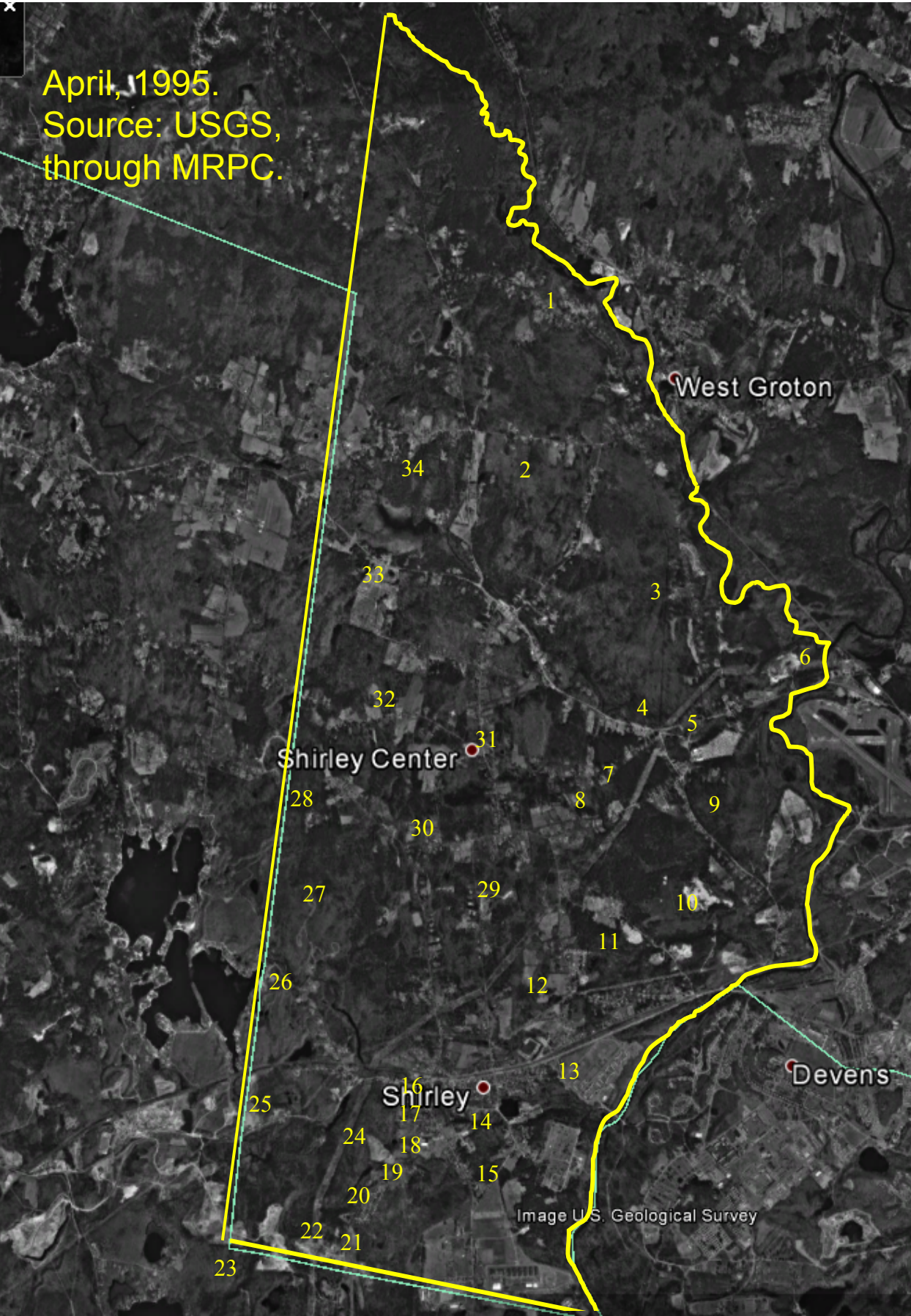


Map 4. Distribution of Environmental Justice Population and Conservation and Recreation Lands





Map 5. Land Use Changes in Shirley, 1995 to 2017.



Numbers on the 1995 and 2017 aerial photos refer to areas where significant land-use changes took place between 1995 and 2017. For land use descriptions, see text, pages 31-33.

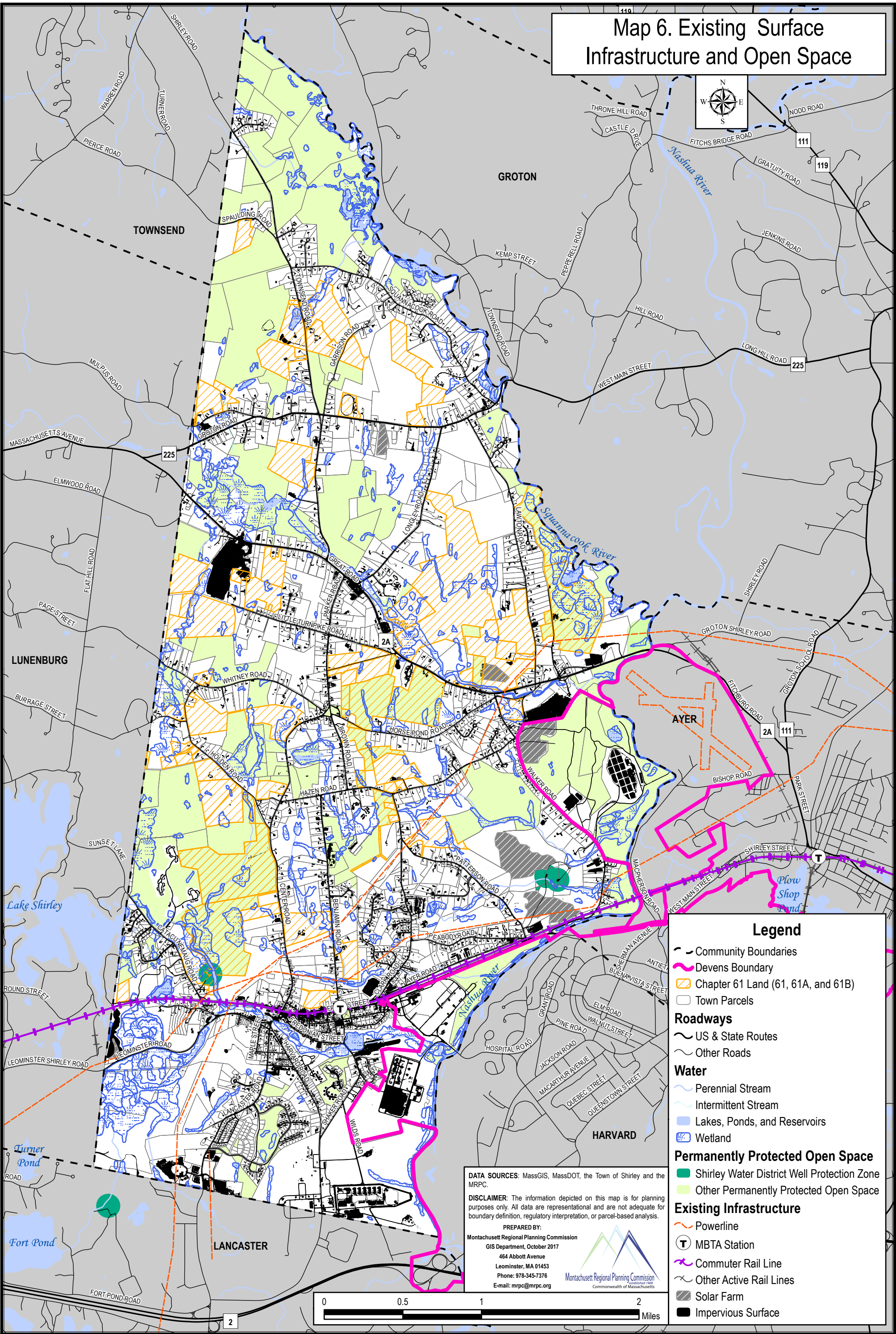
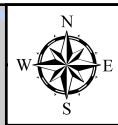
Locations on the maps are approximate.

(NOTE: Town boundary was added by hand and is not absolutely precise.)

Maps prepared by the Shirley Open Space and Recreation Plan Committee, 2017.



# Map 6. Existing Surface Infrastructure and Open Space



**Legend**

Community Boundaries

Devens Boundary

Chapter 61 Land (61, 61A, and 61B)

Town Parcels

**Roadways**

US & State Routes

Other Roads

**Water**

Perennial Stream

Intermittent Stream

Lakes, Ponds, and Reservoirs

Wetland

**Permanently Protected Open Space**

Shirley Water District Well Protection Zone

Other Permanently Protected Open Space

**Existing Infrastructure**

Powerline

MBTA Station

Commuter Rail Line

Other Active Rail Lines

Solar Farm

Impervious Surface

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

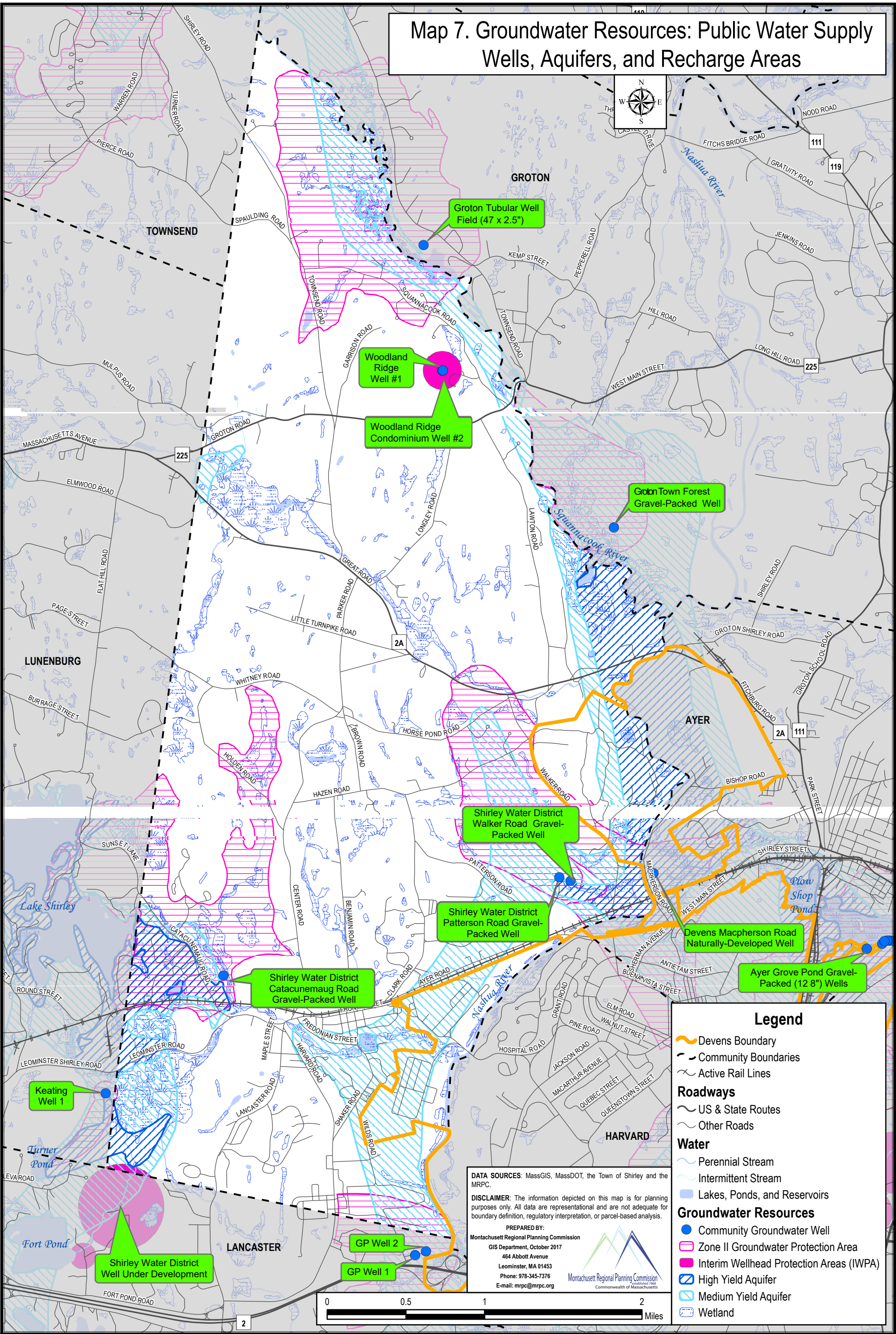
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Montachusett Regional Planning Commission  
GIS Department, October 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)

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Commonwealth of Massachusetts

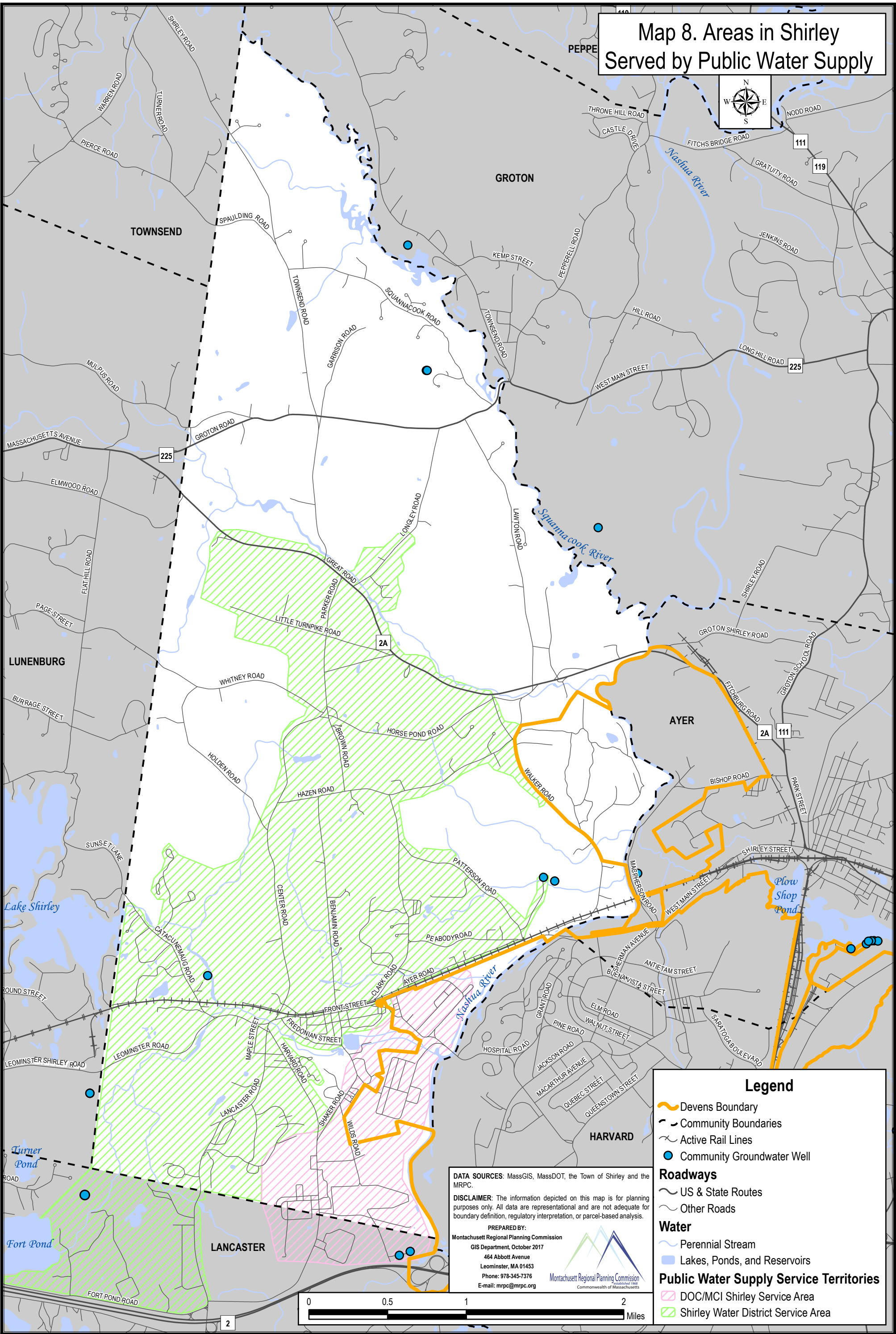


# Map 7. Groundwater Resources: Public Water Supply Wells, Aquifers, and Recharge Areas





# Map 8. Areas in Shirley Served by Public Water Supply



## Legend

- Devens Boundary
- Community Boundaries
- Active Rail Lines
- Community Groundwater Well

## Roadways

- US & State Routes
- Other Roads

## Water

- Perennial Stream
- Lakes, Ponds, and Reservoirs

## Public Water Supply Service Territories

- DOC/MCI Shirley Service Area
- Shirley Water District Service Area

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

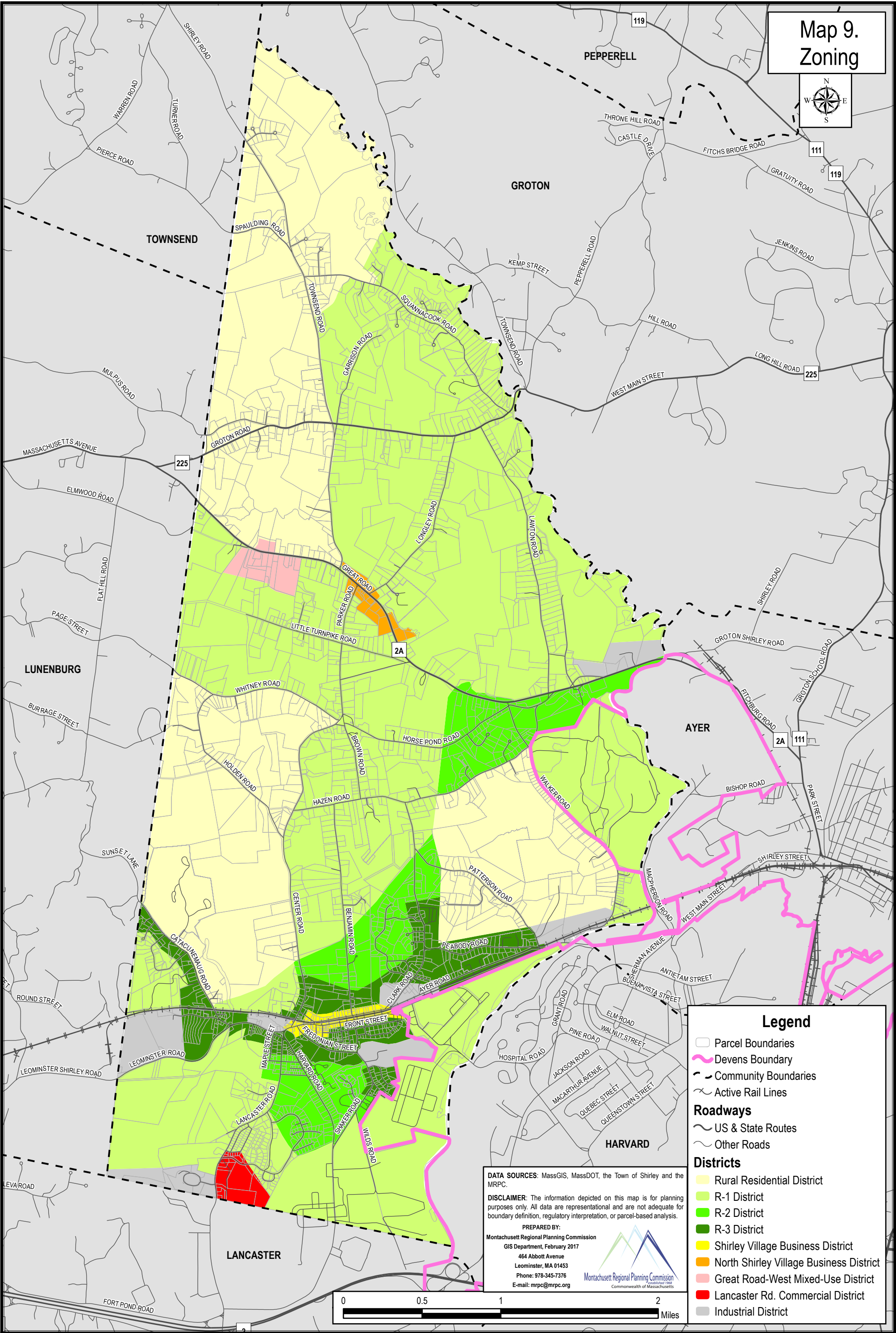
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464 Abbott Avenue  
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Phone: 978-345-7376  
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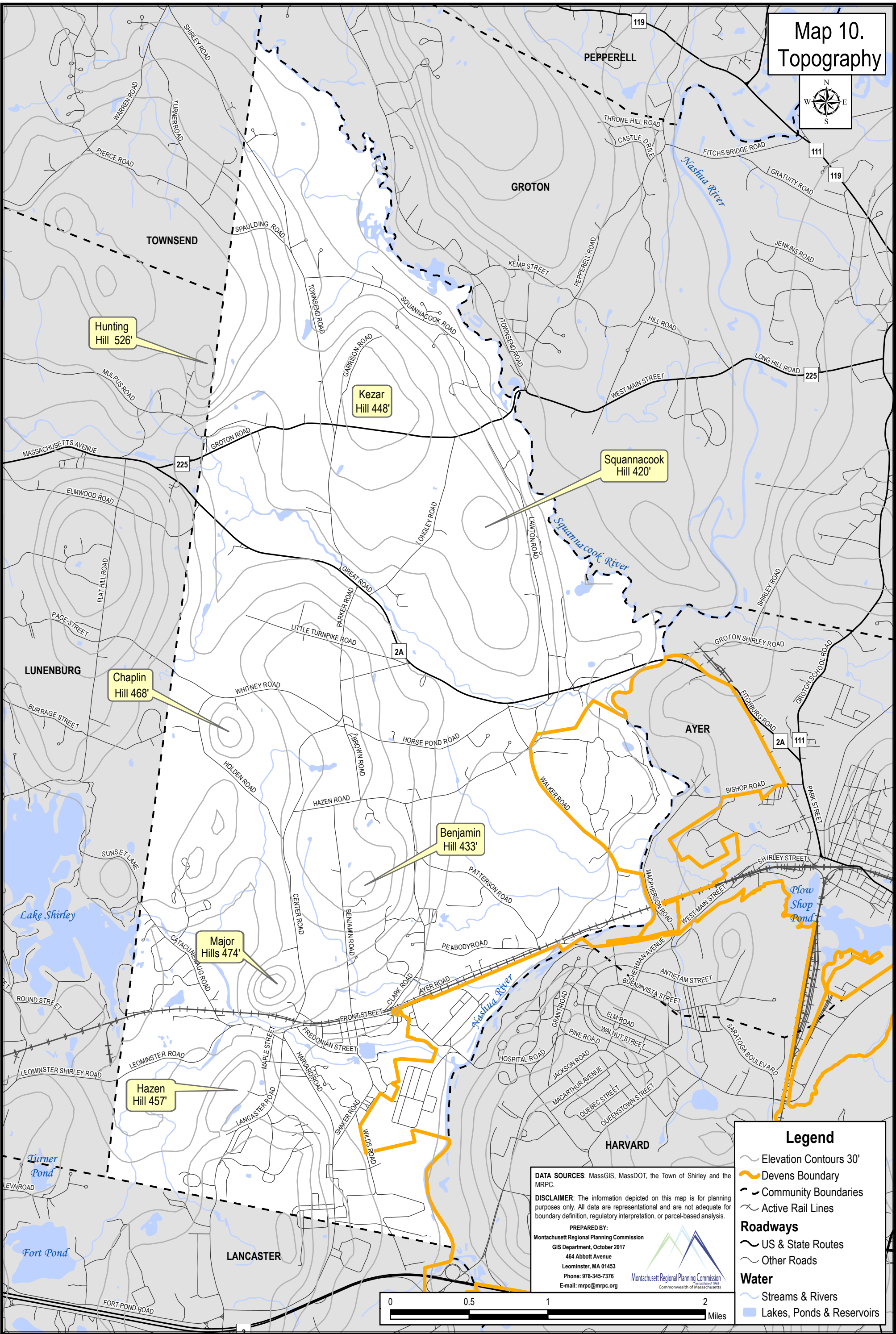
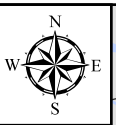


Map 9.  
Zoning





Map 10.  
Topography



**Legend**

- ~ Elevation Contours 30'
- Devens Boundary
- - Community Boundaries
- ~ Active Rail Lines

**Roadways**

- ~ US & State Routes
- ~ Other Roads

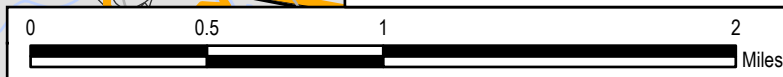
**Water**

- ~ Streams & Rivers
- Lakes, Ponds & Reservoirs

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

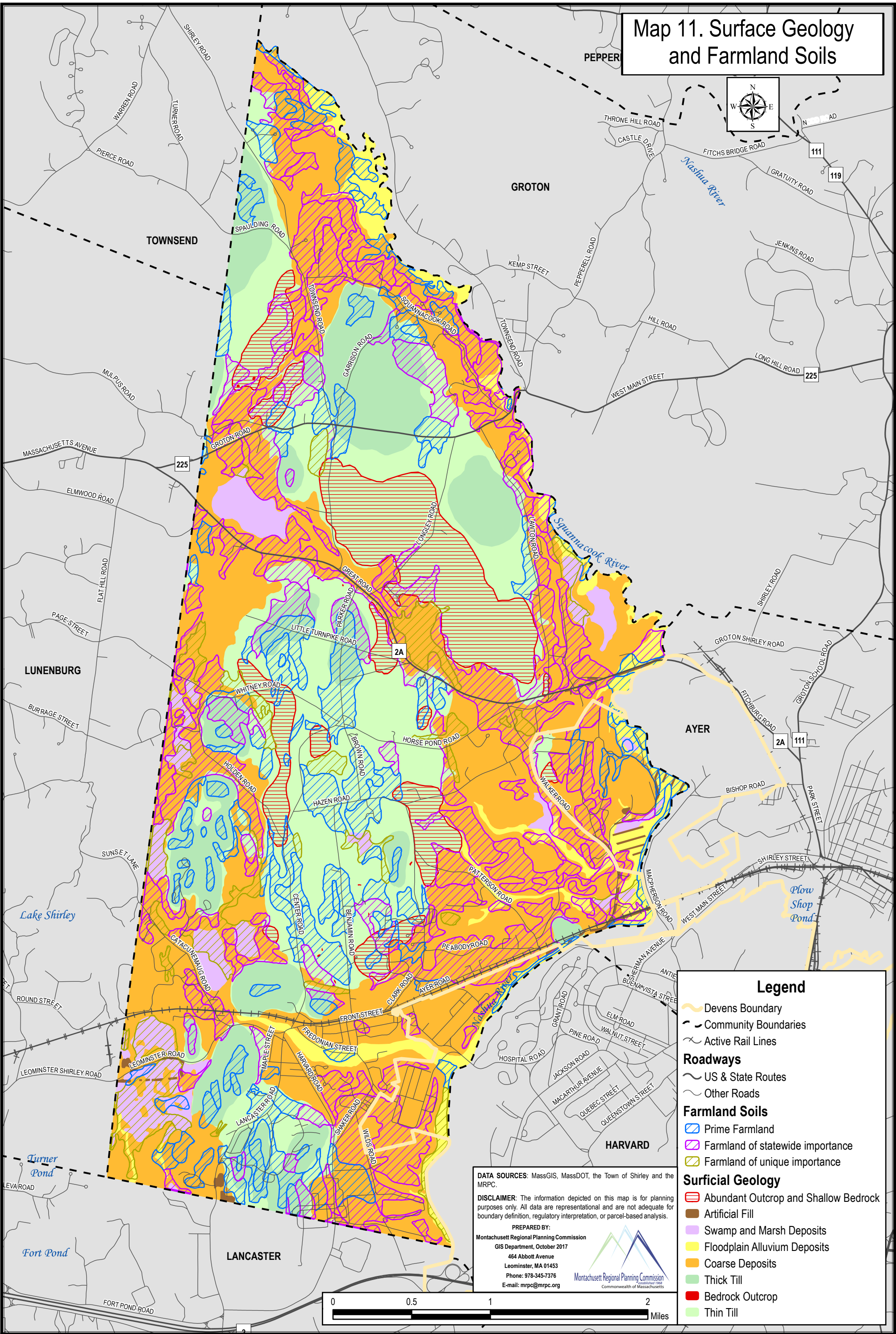
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GIS Department, October 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: mrpc@mrpc.org





Map 11. Surface Geology and Farmland Soils



**Legend**

Devens Boundary

Community Boundaries

Active Rail Lines

**Roadways**

US & State Routes

Other Roads

**Farmland Soils**

Prime Farmland

Farmland of statewide importance

Farmland of unique importance

**Surficial Geology**

Abundant Outcrop and Shallow Bedrock

Artificial Fill

Swamp and Marsh Deposits

Floodplain Alluvium Deposits

Coarse Deposits

Thick Till

Bedrock Outcrop

Thin Till

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

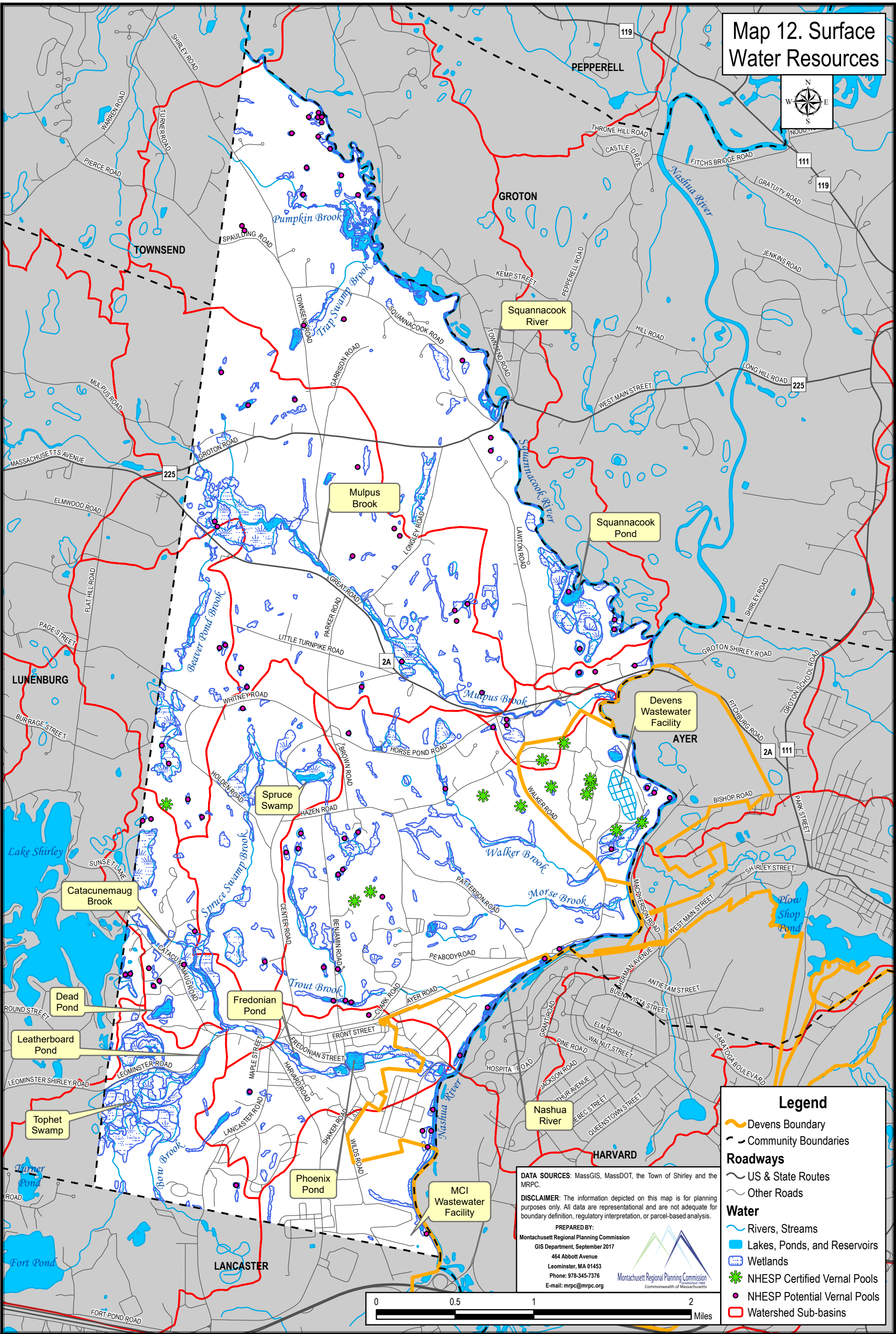
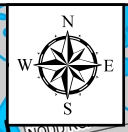
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Montachusett Regional Planning Commission  
GIS Department, October 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)

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# Map 12. Surface Water Resources



**Legend**

Devens Boundary

Community Boundaries

**Roadways**

US & State Routes

Other Roads

**Water**

Rivers, Streams

Lakes, Ponds, and Reservoirs

Wetlands

NHESP Certified Vernal Pools

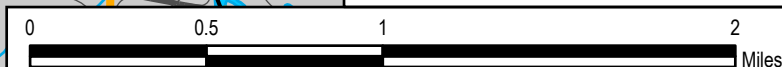
NHESP Potential Vernal Pools

Watershed Sub-basins

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

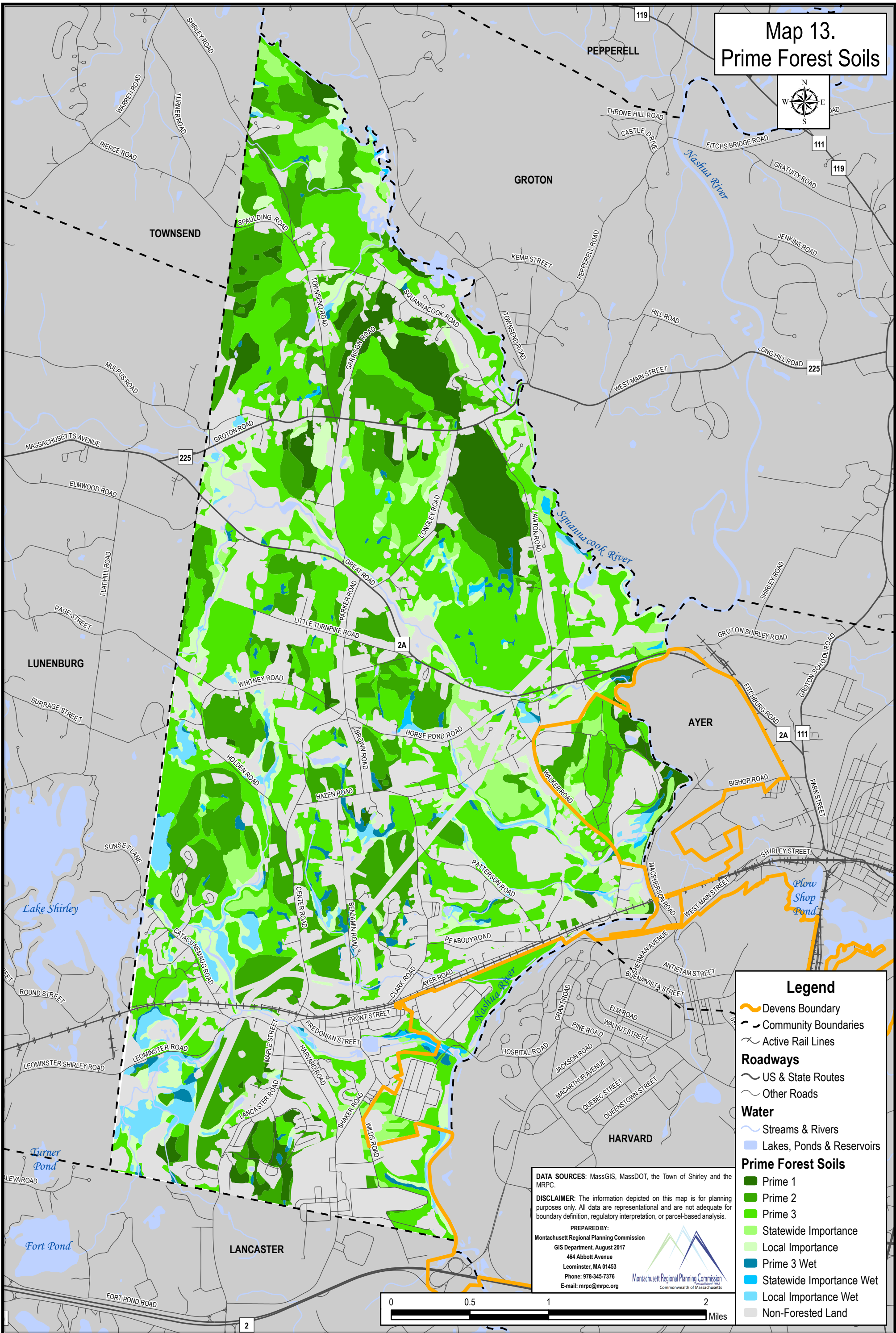
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GIS Department, September 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)





Map 13.  
Prime Forest Soils



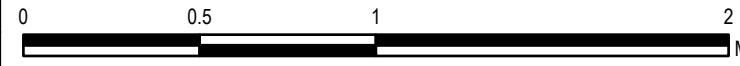
**Legend**

- Devens Boundary
- Community Boundaries
- Active Rail Lines
- Roadways**
  - US & State Routes
  - Other Roads
- Water**
  - Streams & Rivers
  - Lakes, Ponds & Reservoirs
- Prime Forest Soils**
  - Prime 1
  - Prime 2
  - Prime 3
  - Statewide Importance
  - Local Importance
  - Prime 3 Wet
  - Statewide Importance Wet
  - Local Importance Wet
  - Non-Forested Land

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

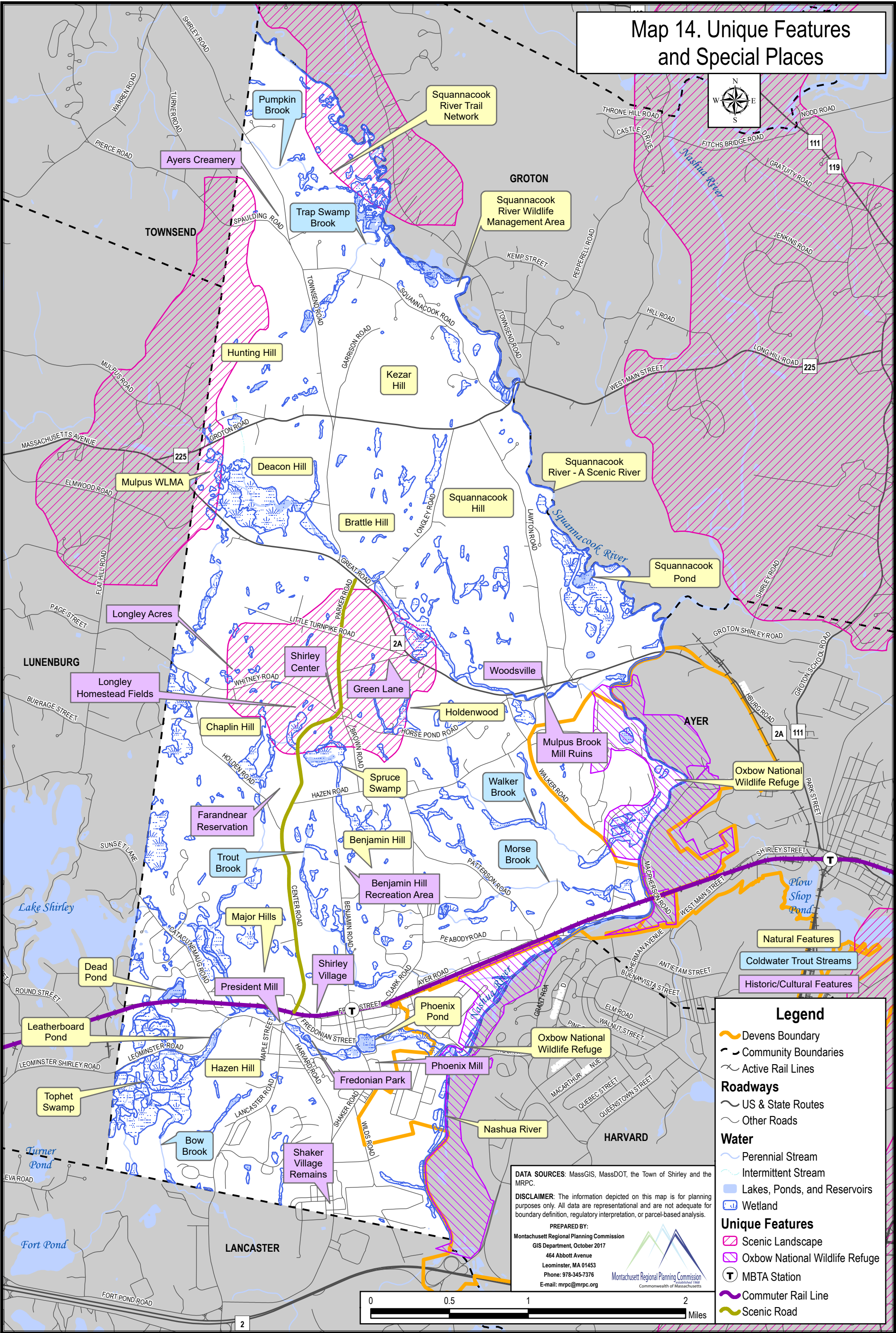
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GIS Department, August 2017  
464 Abbott Avenue  
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E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)



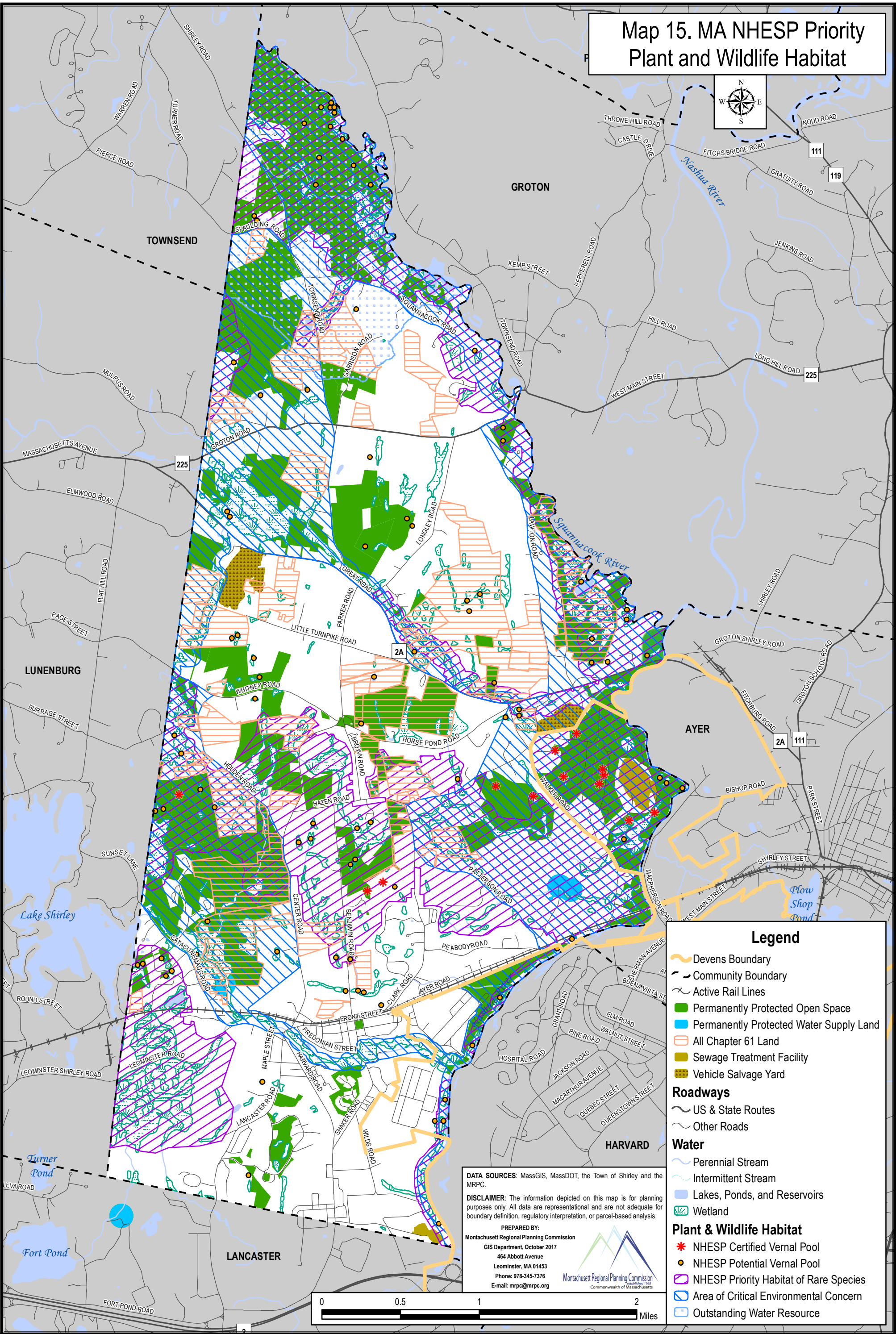


Map 14. Unique Features and Special Places





# Map 15. MA NHESP Priority Plant and Wildlife Habitat



## Legend

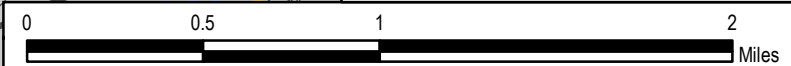
- Devens Boundary
- Community Boundary
- Active Rail Lines
- Permanently Protected Open Space
- Permanently Protected Water Supply Land
- All Chapter 61 Land
- Sewage Treatment Facility
- Vehicle Salvage Yard
- Roadways**
  - US & State Routes
  - Other Roads
- Water**
  - Perennial Stream
  - Intermittent Stream
  - Lakes, Ponds, and Reservoirs
  - Wetland
- Plant & Wildlife Habitat**
  - NHESP Certified Vernal Pool
  - NHESP Potential Vernal Pool
  - NHESP Priority Habitat of Rare Species
  - Area of Critical Environmental Concern
  - Outstanding Water Resource

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

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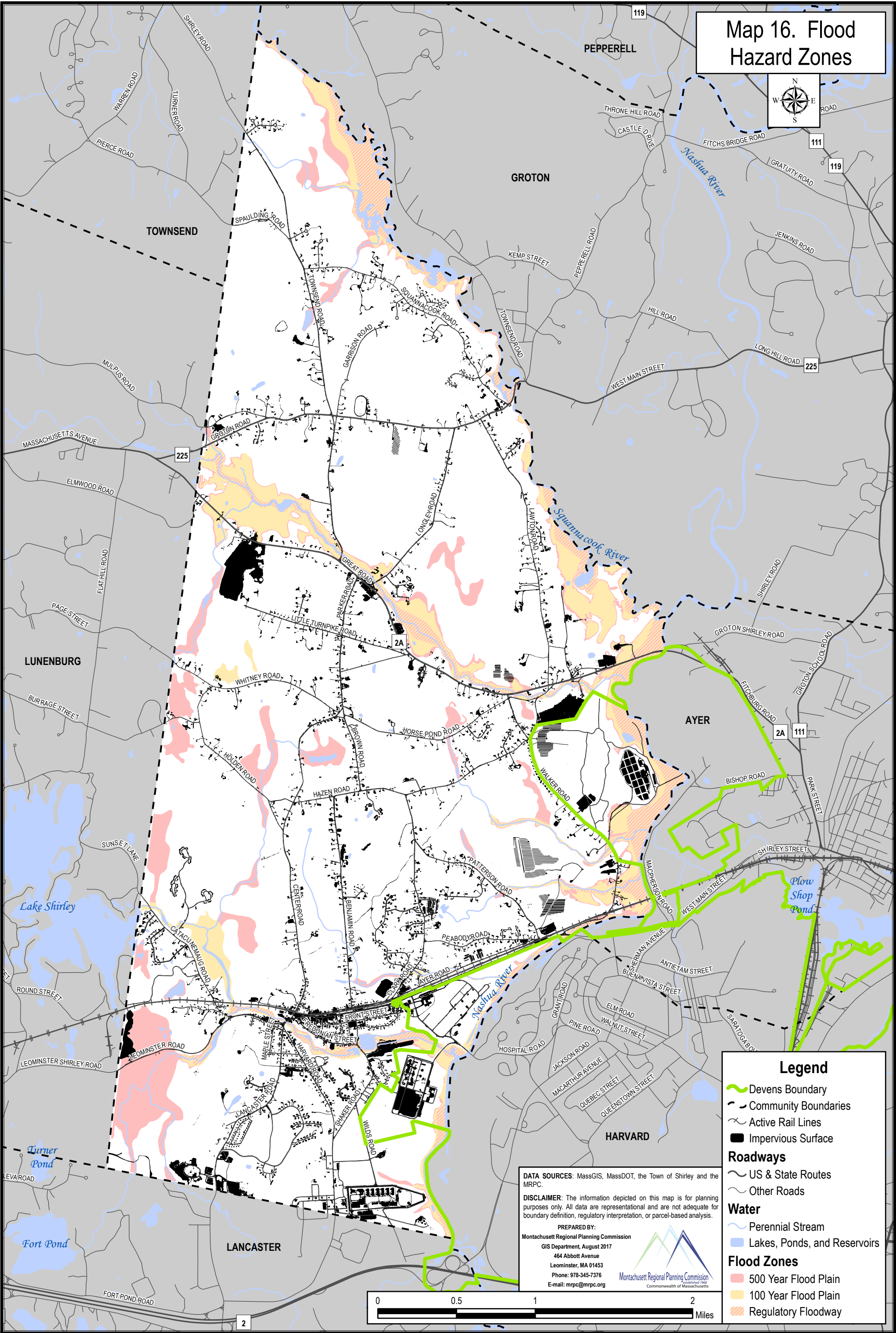
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Montachusett Regional Planning Commission  
GIS Department, October 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)

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Map 16. Flood Hazard Zones



Legend

- Devens Boundary
- Community Boundaries
- Active Rail Lines
- Impervious Surface
- Roadways**
  - US & State Routes
  - Other Roads
- Water**
  - Perennial Stream
  - Lakes, Ponds, and Reservoirs
- Flood Zones**
  - 500 Year Flood Plain
  - 100 Year Flood Plain
  - Regulatory Floodway

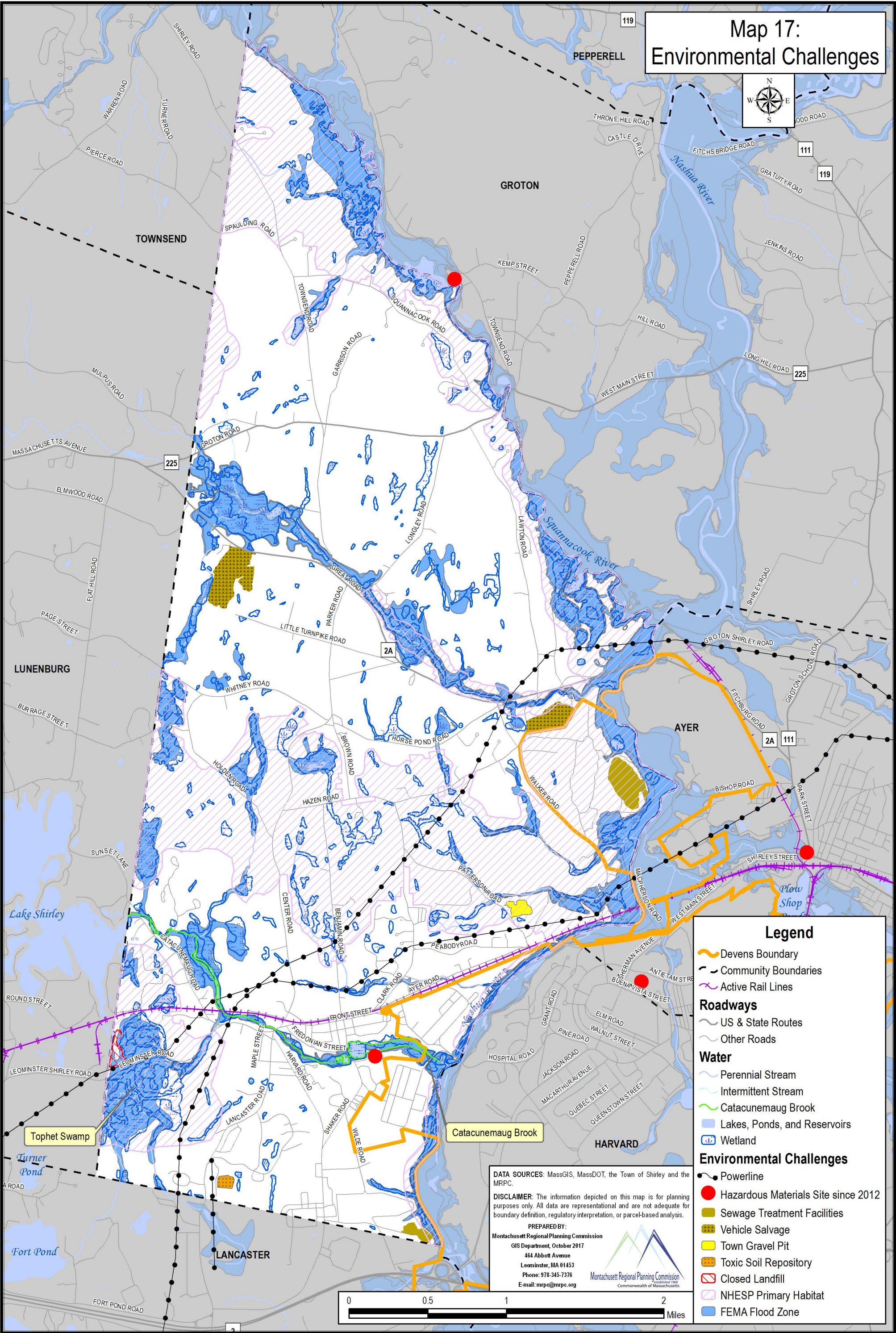
DATA SOURCES: MassGIS, MassDOT, the Town of Shirley and the MRPC.

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Montachusett Regional Planning Commission  
GIS Department, August 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)







# Map 17: Environmental Challenges



**Legend**

Devens Boundary

Community Boundaries

Active Rail Lines

**Roadways**

US & State Routes

Other Roads

**Water**

Perennial Stream

Intermittent Stream

Catacunemaug Brook

Lakes, Ponds, and Reservoirs

Wetland

**Environmental Challenges**

Powerline

Hazardous Materials Site since 2012

Sewage Treatment Facilities

Vehicle Salvage

Town Gravel Pit

Toxic Soil Repository

Closed Landfill

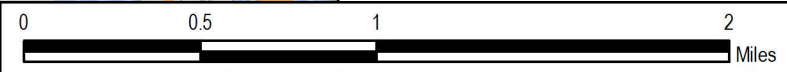

NHESP Primary Habitat

FEMA Flood Zone

DATA SOURCES: MassGIS, MassDOT, the Town of Shirley and the MRPC.

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Montachusett Regional Planning Commission  
GIS Department, October 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: mrpc@mrpc.org





# Map 18: Parks, Playing Fields, & Open Space



Protected lands have many values. Not all are open to public access. Please do not enter private property that is not explicitly open to the public without obtaining permission from the owner first. Appendix C provides information on public access to protected lands.

**Legend**

Devens Boundary

Community Boundaries

Playing Fields

**Infrastructure**

US & State Routes

Other Roads

Active Rail Lines

**Water**

Perennial Stream

Intermittent Stream

Lakes, Ponds, and Reservoirs

Wetland

**Chapter Lands**

Chapter 61: Forest

Chapter 61a: Agriculture

Chapter 61b: Recreation

**Open Space by Level of Protection**

Permanently Protected

Temporarily/Partially Protected

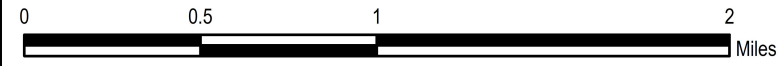
Permanently Protected with CR

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

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Montachusett Regional Planning Commission  
GIS Department, November 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)

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Commonwealth of Massachusetts





# Map 19: Open Space Types & Ownership



Protected lands have many values.  
Not all are open to public access.  
Please do not enter private property  
that is not explicitly open to the public  
without obtaining permission from the  
owner first. Appendix C provides  
information on public access to  
protected lands.

## Legend

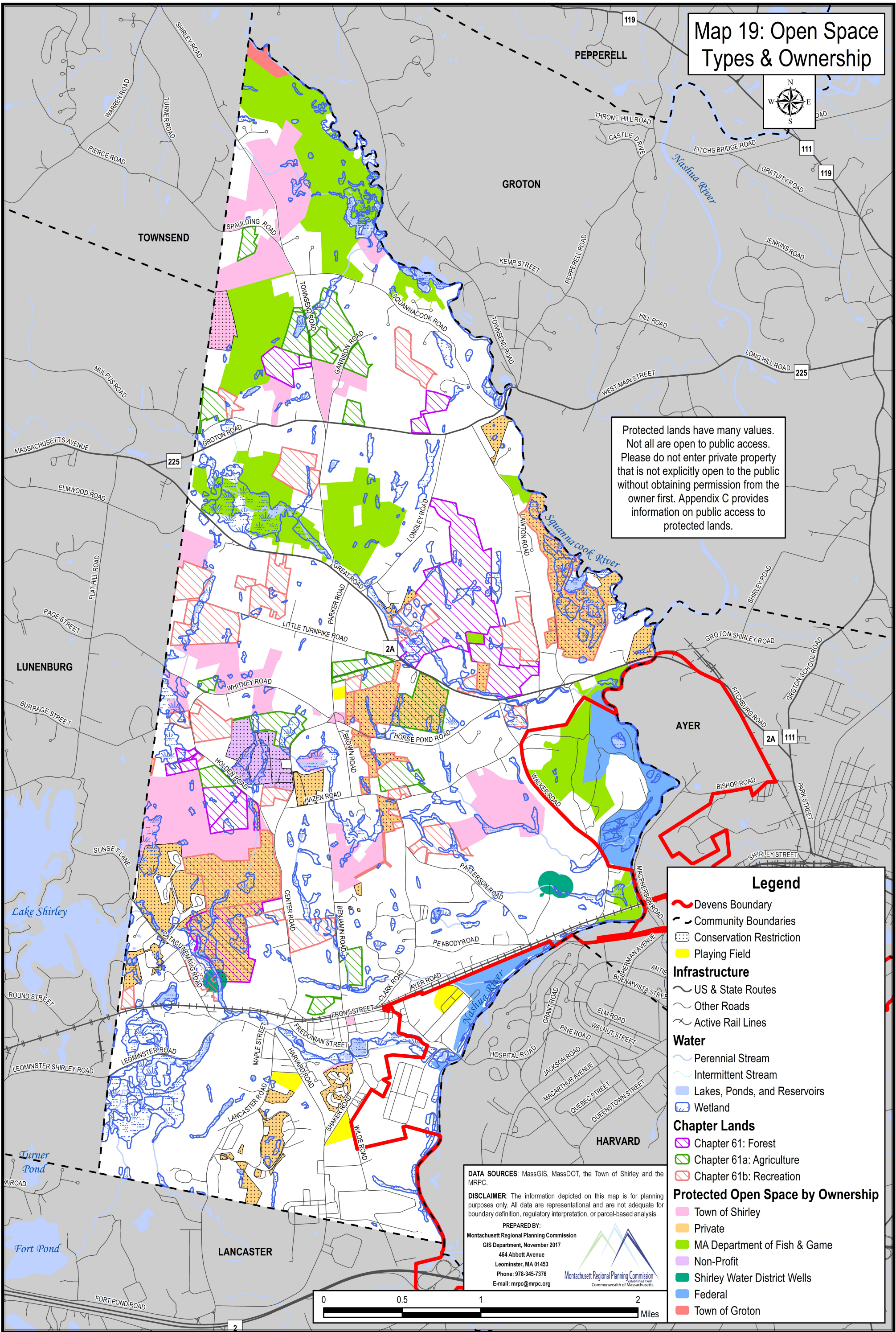
- Devens Boundary
- Community Boundaries
- Conservation Restriction
- Playing Field
- Infrastructure**
  - US & State Routes
  - Other Roads
  - Active Rail Lines
- Water**
  - Perennial Stream
  - Intermittent Stream
  - Lakes, Ponds, and Reservoirs
  - Wetland
- Chapter Lands**
  - Chapter 61: Forest
  - Chapter 61a: Agriculture
  - Chapter 61b: Recreation
- Protected Open Space by Ownership**
  - Town of Shirley
  - Private
  - MA Department of Fish & Game
  - Non-Profit
  - Shirley Water District Wells
  - Federal
  - Town of Groton

**DATA SOURCES:** MassGIS, MassDOT, the Town of Shirley and the MRPC.

**DISCLAIMER:** The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

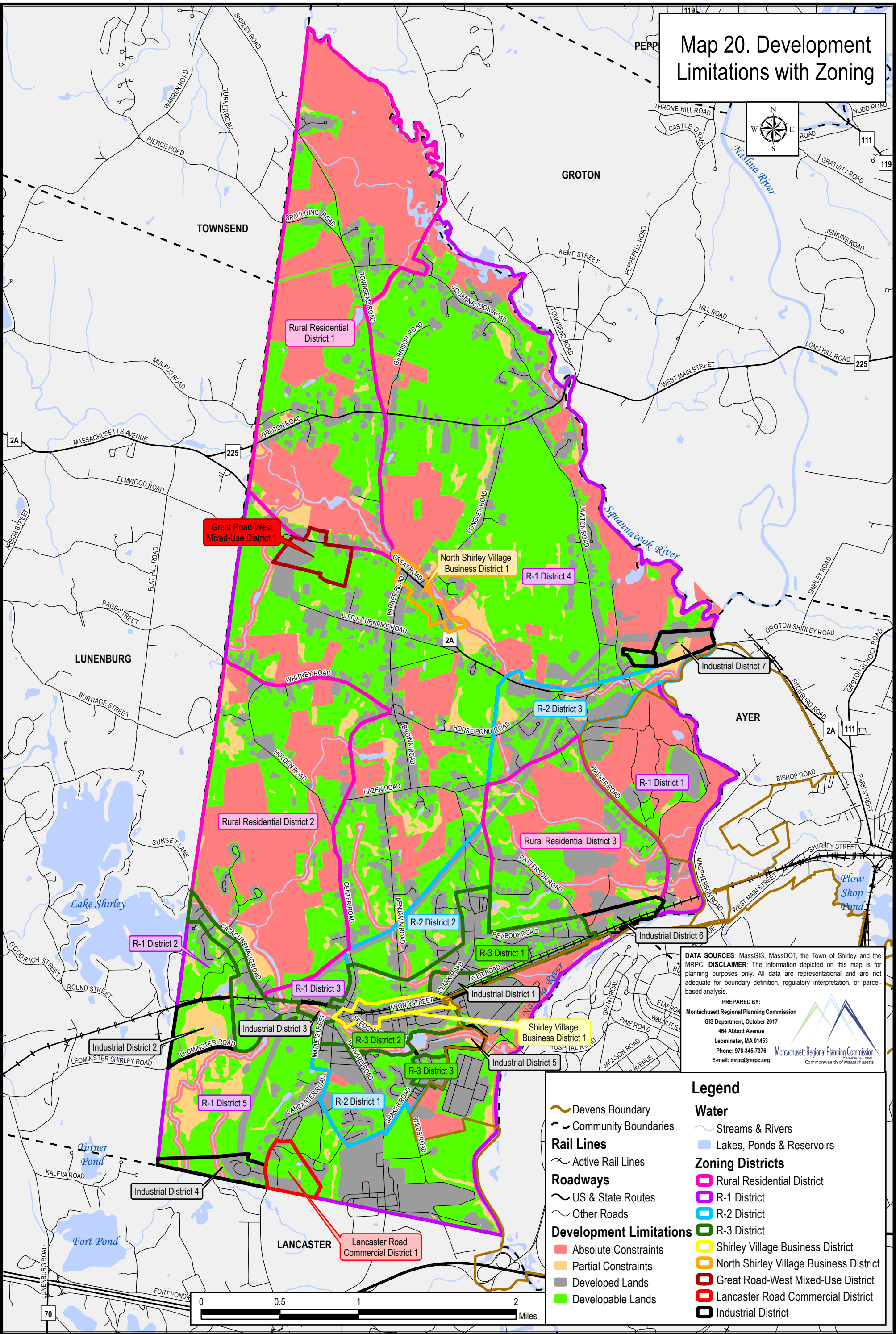
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GIS Department, November 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: [mrpc@mrpc.org](mailto:mrpc@mrpc.org)

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Commonwealth of Massachusetts





Map 20. Development Limitations with Zoning



DATA SOURCES: MassGIS, MassDOT, the Town of Shirley and the MRPC. **DISCLAIMER:** The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

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464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
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Montachusett Regional Planning Commission  
established 1968  
Commonwealth of Massachusetts

**Legend**

- Water**
- Streams & Rivers
  - Lakes, Ponds & Reservoirs
- Zoning Districts**
- Rural Residential District
  - R-1 District
  - R-2 District
  - R-3 District
  - Shirley Village Business District
  - North Shirley Village Business District
  - Great Road-West Mixed-Use District
  - Lancaster Road Commercial District
  - Industrial District

- Devens Boundary**
- Community Boundaries
- Rail Lines**
- Active Rail Lines
- Roadways**
- US & State Routes
  - Other Roads
- Development Limitations**
- Absolute Constraints
  - Partial Constraints
  - Developed Lands
  - Developable Lands



Map 21. Conceptual 7-Year Action Map for Shirley Open Space & Recreation Plan

OSRP GOALS

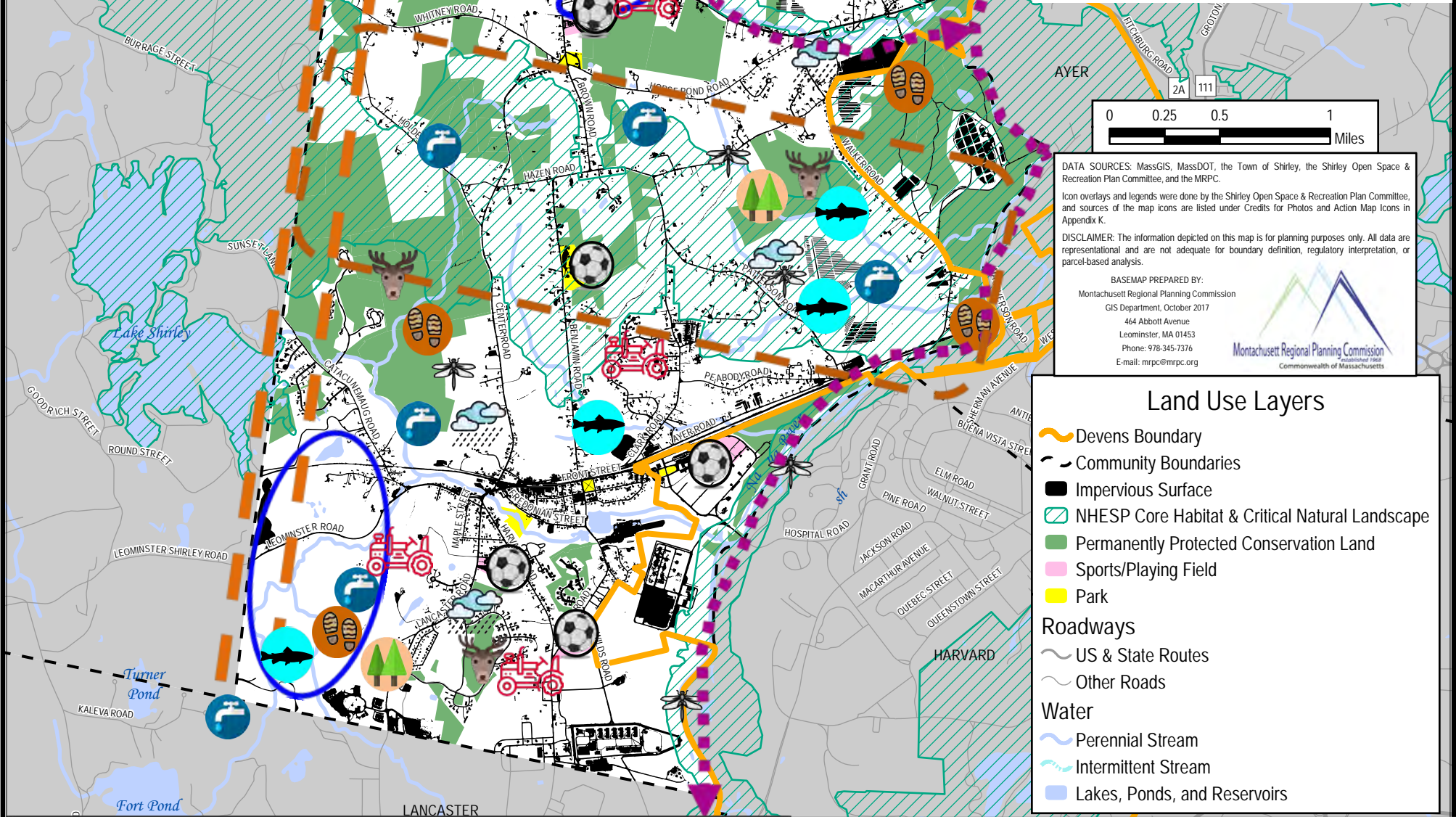
1. Take care of what we have.
2. Protect water, forests, wildlife.
3. Communicate to enhance public awareness, use, and support of open spaces and recreation lands.
4. Plan for the future.

For details, please refer to Action Plan, text, and Appendices C - H.

NOTE: Most icons and recommendations address broad needs and do not refer to specific land parcels. Please see Action Plan and Appendix E for more details.

Suggested Actions

- Sustain coldwater streams and other waters
- Manage for Wildlife
- Protect drinking water and groundwater -- everywhere
- Provide for playing fields, parks, and playgrounds
- Enhance outdoor recreation access and opportunities
- Consider community forestry
- Preserve important farmland and meadows
- Manage stormwater -- everywhere
- Protect riparian corridors and habitat
- Provide connections for wildlife, recreation
- Special areas to consider for protection



DATA SOURCES: MassGIS, MassDOT, the Town of Shirley, the Shirley Open Space & Recreation Plan Committee, and the MRPC.

Icon overlays and legends were done by the Shirley Open Space & Recreation Plan Committee, and sources of the map icons are listed under Credits for Photos and Action Map Icons in Appendix K.

DISCLAIMER: The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

BASEMAP PREPARED BY:  
Montachusett Regional Planning Commission  
GIS Department, October 2017  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: mrpc@mrpc.org

Land Use Layers

- Devens Boundary
- Community Boundaries
- Impervious Surface
- NHESP Core Habitat & Critical Natural Landscape
- Permanently Protected Conservation Land
- Sports/Playing Field
- Park
- Roadways**
  - US & State Routes
  - Other Roads
- Water**
  - Perennial Stream
  - Intermittent Stream
  - Lakes, Ponds, and Reservoirs

Town-Wide Fundamentals Underlying Shirley's Open Space and Recreation Plan



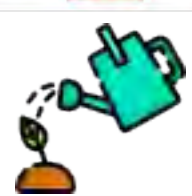
Collaboration among town boards / Volunteerism / Town Officials and residents working together



Review, improvement, implementation, and enforcement of town bylaws and regulations



Environmental justice and access to open space and recreation land for all



Stewardship of public natural resources